



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,944	04/12/2001	David B. Dwyer	H0002046	3235
128 7590 07/24/2007 HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			EXAMINER AMINI, JAVID A	
			ART UNIT 2628	PAPER NUMBER
			MAIL DATE 07/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/833,944	Applicant(s) DWYER ET AL.	
	Examiner Javid A. Amini	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 12-27 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 18-27 is/are allowed.
 6) ☒ Claim(s) 10 and 13-17 is/are rejected.
 7) ☒ Claim(s) 12 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed 5/29/2007 have been fully considered but they are not persuasive.

The rejected claims 10, and 13-17 under 35 U.S.C. 112, second paragraph have been withdrawn.

The rejected claims 10, and 12-27 under 35 U.S.C. 101 have been withdrawn.

Applicant on page 9 of the remarks at the second paragraph argues the reference Davies does not disclose at least a processor that is configured to determine an occurrence of a predefined event.

Examiner's reply: Davies in fig. 9 step 510 (see col. 13 lines 28-39) teaches data for the geological information system of his invention is first obtained from real word information such as surveyor's information, hydrographers information, and from satellite imagery. Existing map data can be obtained from sources such as the U.S. Geological Survey for the United States, from the National Oceanic and Atmospheric Administration for marine and aeronautical navigation, from orthophotos, and from satellite images, among others. It is important that the information obtained is real world information rather than information from maps because features on a map are not typically in the correct scale.

Examiner's interpretation: How does Davies obtain these information? See figure 4 computer 100 that equipped with communication interface 118. For example, communication interface 118 may be an integrated services digital network (ISDN) card or a modem to provide a data communication connection to a corresponding type of telephone line. As another example,

communication interface 118 may be a local area network (LAN) card to provide a data communication connection to a compatible LAN (i.e. noted in col. 7 lines 24-39). The predefined event can also be the United States map. That Examiner refers it as a first visual representation of data (i.e. noted in fig. 6a).

Applicant in same paragraph argues that a second visual representation of the data superimposed over the first visual representation of the data.

Examiner's reply: the second visual representation can be similar to what fig. 6b illustrates as a next level having four tiles (2.x.2) 10-1, 10-2, 10-3, 10-4. The tiles are divided into vertical columns and horizontal rows. For convenience, only objects associated with tile 10-1 will be described herein. Each of the states is a polygon object and is stored in a respective file associated with tile 10-1. As before, the polygon objects are given attributes (i.e. noted in col. 9 lines 30-52).

Applicant on page 9 regarding the second reference argues that he does not make up for the deficiencies of the first reference Davies.

Examiner's reply: From OA "Davies does not explicitly specify superimpose said third visual representation of the data of said third data category over said first visual representation of the data of said first data category such that the third visual representation makes said first visual representation in said second common region." Gorete in fig. 1 illustrates a system 100 located remotely or at a cellsite. That provides a user with the ability to simulate cellsite planning and operation using software tools. The system includes a database, GUI, and communication device.

Applicant argues in the same paragraph that Gorete does not teach superimposing various representations of different data.

Examiner's reply: Gorete at col. 5, lines 2-4 teaches the simulated data can be superimposed on one another and are viewable on a display of computer system using a graphical user interface. Gorete in fig. 10 clearly illustrates the obtained data for cellsite antenna is superimposed over an image of e.g., city or buildings, etc.) Also Gorete at col. 7 lines 1-5 teaches the top layers being transparent in order to view all layers simultaneously. Examiner suggests Applicant to schedule an interview.

Allowable Subject Matter

Claims 18 –27 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 18 recited the first and second color difference are each defined by the following equation:

$$\Delta E (Y,u',v') = [(155\Delta Y/Y_{\max})^2 + (367 \Delta u')^2 + (167 \Delta v')^2]^{1/2}$$

And claims 19-27 are dependent to claim 18.

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The display is configured to produce a fourth visual representation of data of a fourth data category of the plurality of data categories and said processor is configured to control said display to present said first visual representation of the data of said first data category superimposed over said fourth visual representation of the data of said fourth data category such that said first visual representation masks said fourth visual representation in a fourth common region of said first visual representation and said fourth visual

representation, said processor further configured to and superimpose said fourth visual representation of the data of said fourth data category over said first visual representation of the data of said first data category such that the fourth visual representation masks said first visual representation in said fourth common region if said processor determines the predefined event has occurred.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies with U.S. Patent number 6,262,741 B1, and further in view of Almeida, Gorete et al. EP 0 927 941 A2 (hereinafter refers as Gorete)

1. Claim 10.

Davies in figs. 6 illustrates the claim limitations of: "An apparatus for displaying a plurality of data categories, comprising:". Davies at col. 3, lines 47-60 teaches "a display that is configured to display a cursor, and to produce a first visual representation of data of a first data category of the plurality of data categories and a second visual representation of data of a second data category of said plurality of data categories, and a third visual representation of data of a third data category of the plurality of data categories". Davies in fig. 7 illustrates a processor 104 that teaches the step

of “a processor that is configured to receive the data of each of the plurality of data categories and control said display to present said first visual representation of the data of said first data category superimposed over said second visual representation of the data of said second data category and said third visual representation of the data of said third data category”. Examiner’s interpretation: the visual representations in the claim may be considered as a stack of transparent layers. Davies at col. 8 lines 25-31 teaches “ whereby the first visual representation masks said second visual representation in a first common region of said first visual representation and said second visual representation and said third visual representation in a second common region of said first visual representation and said third visual representation, Davies in fig. 9 illustrates that a user selects a map and convert it into layers in step 512, the processor further configured to determine an occurrence of a predefined event and, Davies in fig. 10 step 618 illustrates upon determining the predefined event has occurred, (Davies in fig. 10 step 628 illustrates scroll to another layer) to superimpose said second visual representation of the data of said second data category over said first visual representation of the data of said first data category whereby the second visual representation masks said first visual representation in said first common (Examiner’s interpretation: since all layers are stack as transparent sheets, therefore it is obvious to have different common regions on the map) region.

Davies does not explicitly specify superimpose said third visual representation of the data of said third data category over said first visual representation of the data of said first data category such that the third visual representation makes said first visual representation in said second common region.

However, Gorete at col. 5, lines 2-4 teaches the simulated data can be superimposed on one another and are viewable on a display of computer system using a graphical user interface. Also Gorete at col. 7 lines 1-5 teaches the top layers being transparent in order to view all layers

simultaneously. It is obvious masking the first data i.e. first layer with the second data i.e. second layer by selecting the second data. Davies at step 610 in fig. 10 teaches wherein the predefined event includes movement of the cursor by a user, a predefined change in the data of one or more of the plurality of displayed data categories or both the movement of the cursor by a user and predefined change in the data of one or more of the plurality of displayed data categories.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Gorete into Davies for providing visual representations of data of the claimed invention in order to minimize the complexity of a data structure which is less expensive to build and maintain.

2. Claim 13.

“The apparatus of Claim 10, wherein the data of said plurality of data categories are vehicle data categories”, Davies in fig. 4 illustrates a block diagram illustrating an exemplary computer system 100 upon which an embodiment of the invention may be implemented. The invention is usable with currently available personal computers, mini-mainframes and the like. The invention is also envisioned as usable in the cockpit of an aircraft, on a ship and in moving land vehicles. It is believed that invention described herein can readily be adapted for specific hardware configurations for each of these operating environments.

3. Claim 14.

“The apparatus of Claim 10, wherein the data of said plurality of data categories are aircraft data categories”, Davies in fig. 4 illustrates a block diagram illustrating an exemplary computer system 100 upon which an embodiment of the invention may be implemented. The invention is usable with currently available personal computers, mini-mainframes and the like. The invention is also envisioned as usable in the cockpit of an aircraft, on a ship and in moving land vehicles. It is believed that invention described

herein can readily be adapted for specific hardware configurations for each of these operating environments.

4. Claim 15.

“The apparatus of Claim 10, wherein said display is a Multi-Function Display (MFD)”, Davies at cols. 14-15 lines 65-67 and 1-3 respectively teaches the system also provides database management allowing data entry, data editing retrieval functions include the ability to select certain attributes and records based on their values. Objects are highlighted which is a way of indicating to the user that a feature is the successful result of a query.

5. Claim 16.

“The apparatus of Claim 10, wherein the data of said first data category is sensor data”, the step is obvious because the data received from GPS considered as a sensor data.

6. Claim 17.

“The apparatus of Claim 10, wherein the data of said second data category is navigation data”, the step is obvious because the data received from GPS is considered as navigation data. Applicant requires being more explicit about the second data considered as navigation data.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2628

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Javid A Amini
Examiner
Art Unit 2628

J.A.



KEE M. TUNG
SUPERVISORY PATENT EXAMINER